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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,020	09/25/2003	Quan Vu	SONY-26000	9530
Jonathan O. Owens 7590 HAVERSTOCK & OWENS LLP 162 North Wolfe Road Sunnyvale, CA 94806			EXAMINER CHEA, PHILIP J	
			ART UNIT 2453	PAPER NUMBER
			MAIL DATE 03/04/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/673,020

Applicant(s)

VU ET AL.

Examiner

PHILIP J. CHEA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-19,21-37 and 39-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12-19,21-37 and 39-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date : 1/19/09; 12/29/08; 10/27/08; 10/14/08; 8/25/08.

DETAILED ACTION

This Office Action is in response to an Amendment filed November 28, 2008. Claims 1,3-10,12-19,21-37 and 39-47 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3-10,12-19,21-37,39-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tischer (US 7,404,142), and further in view of Han et al. (US 2002/0143819), herein referred to as Han.

As per claims 28,1, Tischer discloses a network comprising:

one or more network devices (see Fig. 1, *showing one or more network devices connected to network [150]*); and

a first network device coupled to the one or more other network devices (see Fig. 1 [164] *showing first network device as server and one or more other network devices [168] as clients*), the first network device comprising:

one or more applications (see column 3, lines 40-41, *showing one or more applications such as email server and web page server*);

a network layer coupled to interface with the one or more other network devices (see column 3, lines 39-40, *describing network layer such as Internet, local area network or wide area network*);

a communications layer (see column 3, lines 37-39, *describing how server communicates with other computing devices over the network implying a communications layer*);

an extension layer to provide document type definition extensions to the communications

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layer, wherein the document type definition extensions define a hierarchical data content structure for the data content (see column 3, lines 54-59, *describing document type definitions to define a hierarchical structure for sets of digital content items*) and metadata corresponding to the hierarchical data content structure (see column 4, lines 13-20, *describing meta data tags to describe the hierarchical data content*), further wherein the hierarchical data content structure comprises a plurality of channels to store information (see column 5, lines 14-23, *describing channels to store information about the content, such as "Restaurant", "Italian", etc*).

Although the system disclosed by Tischer shows substantial features of the claimed invention (discussed above), it fails to disclose the communication layer providing a communications protocol to manage data content exchange between the first network device and the one or more other network devices, wherein the communications layer comprises an exchange protocol configured to manage the data content exchange between a subscriber and a syndicator according to a hierarchical data content structure.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Tischer, as evidenced by Han.

In an analogous art, Han discloses disseminating Web services and other resources from service and content providers to service consumers and for establishing and implementing a subscription agreement which specifies the terms upon which digital assets are provided to the subscribing customers (see Abstract). Han further discloses a communications layer to provide a communications protocol to manage data content exchange between the first network device and the one or more other network devices (see paragraph 145, *showing how the ICE protocol is used to manage content exchange between content and service providers to consumers*) wherein the communications layer comprises an exchange protocol configured to manage the data content exchange between a subscriber and a syndicator according to hierarchical data content structure (see paragraph 141, *discussing a syndicator as being a server to execute web services and provide content to a subscriber*). In considering the hierarchical data content structure, the system of Tischer discloses this featured element. Han shows that a particular ICE protocol can be used as a communication layer to present the content from the

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syndicator to the subscriber. In this case the data content would be exchanged in a hierarchical content structure because Han discloses the hierarchical structure to organize the web content.

Given the teaching of Han, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Tischer by employing a communications protocol such as ICE to manage data content exchange, such as disclosed by Han, in order to conform to the industry-standard of subscriptions and allow not only traditional content but also web services and other kind of dynamically executed services.

As per claims 3,12,21,30,39 Tischer further discloses wherein each channel within the plurality of channels includes one or more content sub-channels, wherein each channel within the plurality of channels provides data content of a related subject-matter and each content sub-channel of the one or more content sub-channels within a given channel segments the data content within the given channel according to more specific subject-matter than subject-matter of the given channel (see Tischer column 5, lines 5-10, *showing channels for "restaurant" and sub-channel for "italian", where the "italian" sub-channel is related to a "restaurant" and more specific to the "restaurant" channel*).

As per claims 4,13,22,31,40, Tischer further discloses wherein the metadata defines attributes associated with the each channel within the plurality of channels and the content sub-channel of the one or more content-sub-channels within the hierarchical data content structure (see Tischer column 5, lines 5-10, *showing metadata tags to define attributes such as "business category" for channel, "restaurant category" for sub-channel, etc*).

As per claims 5,14,23,32,41, Tischer further discloses a first data content is associated with a first channel and a first content sub-channel within the first channel (see Tischer column 5, lines 5-10, *where first data is "restaurant" and sub-channel is "italian"*).

As per claims 6,15,24,33,42, Tischer further discloses that the first data content is associated with the first channel and the first content sub-channel is according to a subject-matter of the first data content, specific subject-matter of the first channel and more specific subject-matter of the first content sub-channel (see Tischer column 5, lines 5-10, *showing channels for "restaurant" and sub-channel for*

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"italian", where the "italian" sub-channel is related to a "restaurant" and more specific to the "restaurant" channel).

As per claims 7, 16, 25, 34, Han further discloses that the exchange protocol comprises an Information and Content Exchange protocol (see paragraph 145).

As per claims 8, 17, 26, 35, Han further discloses that the Information and Content Exchange protocol includes document type definitions and document type definition extensions provide extensions to the document type definitions of the Information and Content Exchange protocol (see Han paragraph 51, *describing service definition data used in order to set up the resources used between the server and client* see paragraph 50 and Han also describes in paragraph 147, *that the ICE protocol is used to perform a subscription process to subscribe to those resources*).

As per claims 9, 18, 27, 36, 43, Han further discloses that the document type definition extensions are extensible markup language (XML)-based (see paragraph 51).

As per claims 10, 19, Tischer in view of Han disclose a method of providing data content between a first network device and one or more other network devices, the method comprising:

providing a communications protocol to manage data content exchange between the first network device and the one or more other network devices (see Han paragraph 145, *showing how the ICE protocol is used to manage content exchange between content and service providers to consumers*), wherein the communications protocol comprises an exchange protocol configured to manage the data content exchange between a subscriber and a syndicator according to a hierarchical data content structure (see Han paragraph 141);

providing document type definition extensions to the communications protocol, wherein the document type definition extensions define a hierarchical data content structure for the data content and metadata corresponding to the hierarchical data content structure (see Tischer column 3, lines 54-59, *describing document type definitions to define a hierarchical structure for sets of digital content items* and Tischer column 4, lines 13-20, *describing meta data tags to describe the hierarchical data content*);

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configuring the hierarchical data content structure into a plurality of channels to store information (see Tischer column 5, lines 14-23, *describing channels to store information about the content, such as "Restaurant", "Italian", etc*); and

transmitting the data content between the first network device and the one or more other network devices according to the communication protocol and the document type definition extensions to the communications protocol (see Tischer column 3, lines 37-41 and lines 52-59, *describing the server providing e-mails, web pages and other data and client computer reading in a structure file according to the document type definition and communication protocol*).

As per claim 37, Tischer in view of Han disclose a network device coupled to a network of devices, the network device comprising:

one or more applications (see Tischer column 3, lines 40-41, *showing one or more applications such as email server and web page server*);

a network layer coupled to interface with the one or more other network devices (see Tischer column 3, lines 39-40, *describing network layer such as Internet, local area network or wide area network*);

an Information and Content Exchange protocol including document type definitions to manage data content exchange between the network device and the one or more other network devices (see Han paragraph 145, *showing how the ICE protocol is used to manage content exchange between content and service providers to consumers*) according to a hierarchical data content structure (see Tischer column 4, lines 13-20); and

extensions to the document type definitions, wherein the document type definition extensions define a hierarchical data content structure for the data content (see Tischer column 3, lines 54-59, *describing document type definitions to define a hierarchical structure for sets of digital content items*) and metadata corresponding to the hierarchical data content structure (see Tischer column 4, lines 13-20, *describing meta data tags to describe the hierarchical data content*), further wherein the hierarchical data

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content structure comprises a plurality of channels to store information (see Tischer column 5, lines 14-23, *describing channels to store information about the content, such as "Restaurant", "Italian", etc.*).

As per claim 44, Tischer in view of Han disclose a network device coupled to a network of devices, the network device comprising:

one or more applications (see Tischer column 3, lines 40-41, *showing one or more applications such as email server and web page server*);

a network layer coupled to interface with the one or more other network devices (see Tischer column 3, lines 39-40, *describing network layer such as Internet, local area network or wide area network*);

a communications layer to provide a communication protocol to manage data content exchange between the network device and the one or more network devices (see Han paragraph 145, *showing how the ICE protocol is used to manage content exchange between content and service providers to consumers*), wherein the communications layer comprises an exchange protocol configured to manage the data content exchange between a subscriber and a syndicator (see Han paragraph 141) according to a hierarchical data content structure (see Tischer column 4, lines 13-20);

an extension layer to provide document type definition extensions to the communications layer, wherein the document type definition extensions define a hierarchical data content structure for the data content (see Tischer column 3, lines 54-59, *describing document type definitions to define a hierarchical structure for sets of digital content items*) and metadata corresponding to the hierarchical data content structure (see Tischer column 4, lines 13-20, *describing meta data tags to describe the hierarchical data content*), further wherein the hierarchical data content structure comprises a plurality of channels (see Tischer column 5, lines 14-23, *describing channels to store information about the content, such as "Restaurant", "Italian", etc.*), wherein each channel within the plurality of channels includes one or more content sub-channels, wherein each channel within the plurality of channels provides data content of a related subject-matter and each content sub-channel of the one or more content sub-channels within a given channel segments the data content within the given channel according to more specific subject-

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matter than subject-matter of the given channel (see Tischer column 5, lines 5-10, *showing channels for "restaurant" and sub-channel for "italian", where the "italian" sub-channel is related to a "restaurant" and more specific to the "restaurant" channel*), wherein the metadata defines attributes of each of the plurality of channels, each of the sub-channels and each of the data content (see Tischer column 5, lines 5-10, *showing metadata tags to define attributes such as "business category", "restaurant category", etc*).

As per claim 45, Tischer further discloses metadata associated with each channel of the plurality of channels includes a title, a caption, an icon-url, an ice-element and an item-group-id (see column 3, line 63 – column 4, line 9, *where the title is "phonebook", a caption is "restaurant" an ice-element is "dtdfile", an item-group-id is "business category", and an icon-url is considered digital content item found in column 4, lines 39-44*).

As per claim 46, Tischer further discloses that the metadata associated with each content sub-channel includes a title, a caption, a priority, an icon-url, an ice-element and an item-group-id (see column 5, lines 5-10, *where a title is "restaurant" a caption is "italian" an ice-element is "xml file" an item-group-id is "business category" and an icon-url is considered digital content item found in column 4, lines 39-44, and priority is considered a preference counter in the DTD that gives priority to a certain category over others based on how many times a user has selected the item see column 10, lines 17-37 and column 10, line 64 – column 11, line 6*).

As per claim 47, Tischer discloses that the metadata associated with each data content includes a size, an ice-element and an item-id (see column 7, lines 23-29, *describing a style definition applied to the category name for the size of the font* and column 6, lines 5-10, *showing an ice-element of "xml file" and item-id of "Italian restaurant"*) and Han discloses metadata including content data of a url (see page 13, Table 1, "url used to access service"). One of ordinary skill in the art would have found it obvious to include a url meta tag in order to locate the particular service offered by the server on the web such as disclosed by Han.

Response to Arguments

3. Applicant's arguments filed November 28, 2008 have been fully considered but they are not persuasive.

A) Applicant contends that there is no suggestion or inventive that would motivate on skill in the art to modify Tischer to employ an Information and Content Exchange protocol configured to manage data content exchanged between a subscriber and syndicator according to a hierarchical data content structure.

In considering A), the Examiner respectfully disagrees. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Tischer discloses a server client system that allows clients to view web content in a hierarchical manner (see Fig. 1 showing the server client system and column 4, lines 13-20 describing the hierarchical structure of web content). Han is analogous because the server computer of Tischer relates to the syndicator taught by Han and the client computer of Tischer relates to the subscriber taught by Han. Someone of ordinary skill in the art would find it advantageous to employ a syndicator subscriber system on Tischer so that clients can receive dynamic content such as catalog information containing service and content offers and can subscribe to the particular content that is desired. Since Tischer teaches a system of supplying clients with information such as a directory or catalog (in this case a catalog of restaurants), it would be obvious to allow a syndicator to offer subscribers certain catalogs for selection in a hierarchical manner to easily organize the content that is offered.

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4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. CHEA whose telephone number is (571)272-3951. The examiner can normally be reached on M-F 6:30-4:00 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip J Chea
Examiner
Art Unit 2453

/Philip J Chea/
Examiner, Art Unit 2453

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2/24/09

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457